

OIFE

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/925,637

DATE: 08/17/2001  
TIME: 12:10:26

Input Set : A:\pb560-sl.txt  
Output Set: N:\CRF3\08162001\I925637.raw

ENTER

3 <110> APPLICANT: Choi  
5 <120> TITLE OF INVENTION: Staphylococcus aureus Polynucleotides and Polypeptides  
7 <130> FILE REFERENCE: PB560  
9 <140> CURRENT APPLICATION NUMBER: US/09/925,637  
9 <141> CURRENT FILING DATE: 2001-08-31  
9 <150> PRIOR APPLICATION NUMBER: PCT/USQ0/23773  
10 <151> PRIOR FILING DATE: 2000-08-31  
12 <150> PRIOR APPLICATION NUMBER: US 60/151,933  
13 <151> PRIOR FILING DATE: 1999-09-01  
15 <150> PRIOR APPLICATION NUMBER: US 08/781,986  
16 <151> PRIOR FILING DATE: 1997-01-03  
18 <150> PRIOR APPLICATION NUMBER: US 08/956,171  
19 <151> PRIOR FILING DATE: 1997-10-20  
21 <150> PRIOR APPLICATION NUMBER: US 60/009,861  
22 <151> PRIOR FILING DATE: 1996-01-06  
24 <160> NUMBER OF SEQ ID NOS: 74  
26 <170> SOFTWARE: PatentIn Ver. 2.0  
28 <210> SEQ ID NO: 1  
29 <211> LENGTH: 1318  
30 <212> TYPE: DNA  
31 <213> ORGANISM: Homo sapiens  
33 <400> SEQUENCE: 1  
34 atgacacact atcattttgt cggaattaaa ggttctggca tgagttcatt agcacaaatc 60  
35 atgcatgatt taggacatga agttcaagga tcggatattg agaactacgt atttacagaa 120  
36 gttgctctta gaaataagg gataaaaata ttaccatttg atgctaataa cataaaagaa 180  
37 gatattgtag ttatacaagg taatgcattc gcgagtagcc atgaagaaat agtacgtgca 240  
38 catcaattga aattagatgt tgtaagttat aatgattttt taggacagat tattgatcaa 300  
39 tatacttcag tagctgtaac tgggtgcacat ggtaaaactt ctacaacagg tttattatca 360  
40 catgttatga atggtgataa aaagacttca tttttaattg gtgatggcac aggtatggga 420  
41 ttgcttgaaa gtgattattt cgcttttgag gcatgtgaat atagacgtca ctttttaagt 480  
42 tataaacctg attacgcaat tatgacaaat attgatttcg atcatcctga ttattttaaa 540  
43 gatattaatg atgtttttga tgcattccaa gaaatggcac ataattgtta aaaaggtatt 600  
44 attgcttggg gtgatgatga acatctacgt aaaattgaag cagatgttcc aatttattat 660  
45 tatggattta aagattcgga tgacatttat gctcaaaata ttcaaattac ggataaagg 720  
46 actgcttttg atgtgtatgt ggatggtgag ttttatgatc acttcctgtc tccacaatat 780  
47 ggtgaccata cagtttttaa tgcattagct gtaattgca ttagttattt agagaagcta 840  
48 gatgttacaa atattaaaga agcattagaa acgtttggtg gtgttaaacg tcgtttcaat 900  
49 gaaactacaa ttgcaaatca agttattgta gatgattatg cacaccatcc aagagaaatt 960  
50 agtgctacaa ttgaaacagc acgaaagaaa tatccacata aagaagttgt tgcagtattt 1020  
51 caaccacaca ctttctctag aacacaggca tttttaaatg aatttgcaga aagtttaagt 1080  
52 aaagcagatc gtgtattctt atgtgaaatt tttggatcaa ttagagaaaa tactggcgca 1140  
53 ttaacgatac aagatttaatt tgataaaatt gaaggtgcat cgtaatttaa tgaagattct 1200  
54 attaatgtat tagaacaatt tgataatgct gttattttat ttatgggtgc aggtgatatt 1260  
55 caaaaattac aaaatgcata tttagataaa ttaggcatga aaaatgcgtt ttaagctt 1318  
57 <210> SEQ ID NO: 2  
58 <211> LENGTH: 437  
59 <212> TYPE: PRT

ENTERED

p. 5

## RAW SEQUENCE LISTING

DATE: 08/17/2001

PATENT APPLICATION: US/09/925,637

TIME: 12:10:26

Input Set : A:\pb560-sl.txt

Output Set: N:\CRF3\08162001\I925637.raw

```

60 <213> ORGANISM: Homo sapiens
62 <400> SEQUENCE: 2
63 Met Thr His Tyr His Phe Val Gly Ile Lys Gly Ser Gly Met Ser Ser
64   1           5           10           15
66 Leu Ala Gln Ile Met His Asp Leu Gly His Glu Val Gln Gly Ser Asp
67           20           25           30
69 Ile Glu Asn Tyr Val Phe Thr Glu Val Ala Leu Arg Asn Lys Gly Ile
70           35           40           45
72 Lys Ile Leu Pro Phe Asp Ala Asn Asn Ile Lys Glu Asp Met Val Val
73           50           55           60
75 Ile Gln Gly Asn Ala Phe Ala Ser Ser His Glu Glu Ile Val Arg Ala
76   65           70           75           80
78 His Gln Leu Lys Leu Asp Val Val Ser Tyr Asn Asp Phe Leu Gly Gln
79           85           90           95
81 Ile Ile Asp Gln Tyr Thr Ser Val Ala Val Thr Gly Ala His Gly Lys
82           100          105          110
84 Thr Ser Thr Thr Gly Leu Leu Ser His Val Met Asn Gly Asp Lys Lys
85           115          120          125
87 Thr Ser Phe Leu Ile Gly Asp Gly Thr Gly Met Gly Leu Pro Glu Ser
88           130          135          140
90 Asp Tyr Phe Ala Phe Glu Ala Cys Glu Tyr Arg Arg His Phe Leu Ser
91 145           150           155           160
93 Tyr Lys Pro Asp Tyr Ala Ile Met Thr Asn Ile Asp Phe Asp His Pro
94           165           170           175
96 Asp Tyr Phe Lys Asp Ile Asn Asp Val Phe Asp Ala Phe Gln Glu Met
97           180          185          190
99 Ala His Asn Val Lys Lys Gly Ile Ile Ala Trp Gly Asp Asp Glu His
100          195          200          205
102 Leu Arg Lys Ile Glu Ala Asp Val Pro Ile Tyr Tyr Tyr Gly Phe Lys
103          210          215          220
105 Asp Ser Asp Asp Ile Tyr Ala Gln Asn Ile Gln Ile Thr Asp Lys Gly
106 225          230          235          240
108 Thr Ala Phe Asp Val Tyr Val Asp Gly Glu Phe Tyr Asp His Phe Leu
109          245          250          255
111 Ser Pro Gln Tyr Gly Asp His Thr Val Leu Asn Ala Leu Ala Val Ile
112          260          265          270
114 Ala Ile Ser Tyr Leu Glu Lys Leu Asp Val Thr Asn Ile Lys Glu Ala
115          275          280          285
117 Leu Glu Thr Phe Gly Gly Val Lys Arg Arg Phe Asn Glu Thr Thr Ile
118          290          295          300
120 Ala Asn Gln Val Ile Val Asp Asp Tyr Ala His His Pro Arg Glu Ile
121 305          310          315          320
123 Ser Ala Thr Ile Glu Thr Ala Arg Lys Lys Tyr Pro His Lys Glu Val
124          325          330          335
126 Val Ala Val Phe Gln Pro His Thr Phe Ser Arg Thr Gln Ala Phe Leu
127          340          345          350
129 Asn Glu Phe Ala Glu Ser Leu Ser Lys Ala Asp Arg Val Phe Leu Cys
130          355          360          365
132 Glu Ile Phe Gly Ser Ile Arg Glu Asn Thr Gly Ala Leu Thr Ile Gln

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/925,637

DATE: 08/17/2001

TIME: 12:10:27

Input Set : A:\pb560-sl.txt

Output Set: N:\CRF3\08162001\I925637.raw

```

133      370      375      380
135 Asp Leu Ile Asp Lys Ile Glu Gly Ala Ser Leu Ile Asn Glu Asp Ser
136 385      390      395      400
138 Ile Asn Val Leu Glu Gln Phe Asp Asn Ala Val Ile Leu Phe Met Gly
139      405      410      415
141 Ala Gly Asp Ile Gln Lys Leu Gln Asn Ala Tyr Leu Asp Lys Leu Gly
142      420      425      430
144 Met Lys Asn Ala Phe
145      435
148 <210> SEQ ID NO: 3
149 <211> LENGTH: 1074
150 <212> TYPE: DNA
151 <213> ORGANISM: Homo sapiens
153 <400> SEQUENCE: 3
154 atgcattttg atcaattaga tattgtagaa gaaagatacg aacagttaaa tgaactgtta 60
155 agtgacccag atgttgtaaa tgattcagat aaattacgta aatattctaa agagcaagct 120
156 gatttacaaa aaactgtaga tgtttatcgt aactataaag ctaaaaaaga agaattagct 180
157 gatattgaag aaatgttaag tgagactgat gataaagaag aagtagaaat gttaaaagag 240
158 gagagtaatg gtattaaagc tgaacttcca aatcttgaag aagagcttaa aatattattg 300
159 attcctaaag atcctaatag tgacaaagac gttattgtag aaataagagc agcagcaggt 360
160 ggtgatgagg ctgcgatttt tgctggtgat ttaatgcgta tgtattcaaa gtatgctgaa 420
161 tcacaaggat tcaaaactga aatagtagaa gcgtctgaaa gtgaccatgg tggttacaaa 480
162 gaaattagtt tctcagtttc tggtaatggc gcgtatagta aattgaaatt tgaaaatggt 540
163 gcgcaccgcg ttcaacgtgt gcctgaaaca gaatcaggtg gacgtattca tacttcaaca 600
164 gctacagtgg cagttttacc agaagttgaa gatgtagaaa ttgaaattag aaatgaagat 660
165 ttaaaaatcg acacgtatcg ttcaagtggg gcaggtgggc agcacgtaaa cacaactgac 720
166 tctgcagtac gtattaccca ttaccaact ggtgtcattg caacatcttc tgagaagtct 780
167 caaattcaaa accgtgaaaa agcaatgaaa gtgttaaaag cacgtttata cgatatgaaa 840
168 gttcaagaag aacaacaaaa gtatgcgtca caacgtaaat cagcagtcgg tactggtgat 900
169 cgttcagaac gtattcgaac ttataattat ccacaaagcc gtgtaacaga ccatcgtata 960
170 ggtctaacgc ttcaaaaatt agggcaaatt atggaaggcc atttagaaga aattatagat 1020
171 gcactgactt tatcagagca gacagataaa ttgaaagaac ttaataatgg tgaa 1074
173 <210> SEQ ID NO: 4
174 <211> LENGTH: 358
175 <212> TYPE: PRT
176 <213> ORGANISM: Homo sapiens
178 <400> SEQUENCE: 4
179 Met His Phe Asp Gln Leu Asp Ile Val Glu Glu Arg Tyr Glu Gln Leu
180 1      5      10      15
182 Asn Glu Leu Leu Ser Asp Pro Asp Val Val Asn Asp Ser Asp Lys Leu
183      20      25      30
185 Arg Lys Tyr Ser Lys Glu Gln Ala Asp Leu Gln Lys Thr Val Asp Val
186      35      40      45
188 Tyr Arg Asn Tyr Lys Ala Lys Lys Glu Glu Leu Ala Asp Ile Glu Glu
189      50      55      60
191 Met Leu Ser Glu Thr Asp Asp Lys Glu Glu Val Glu Met Leu Lys Glu
192 65      70      75      80
194 Glu Ser Asn Gly Ile Lys Ala Glu Leu Pro Asn Leu Glu Glu Glu Leu
195      85      90      95

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/925,637

DATE: 08/17/2001

TIME: 12:10:27

Input Set : A:\pb560-sl.txt

Output Set: N:\CRF3\08162001\I925637.raw

```

197 Lys Ile Leu Leu Ile Pro Lys Asp Pro Asn Asp Asp Lys Asp Val Ile
198          100          105          110
200 Val Glu Ile Arg Ala Ala Ala Gly Gly Asp Glu Ala Ala Ile Phe Ala
201          115          120          125
203 Gly Asp Leu Met Arg Met Tyr Ser Lys Tyr Ala Glu Ser Gln Gly Phe
204          130          135          140
206 Lys Thr Glu Ile Val Glu Ala Ser Glu Ser Asp His Gly Gly Tyr Lys
207 145          150          155          160
209 Glu Ile Ser Phe Ser Val Ser Gly Asn Gly Ala Tyr Ser Lys Leu Lys
210          165          170          175
212 Phe Glu Asn Gly Ala His Arg Val Gln Arg Val Pro Glu Thr Glu Ser
213          180          185          190
215 Gly Gly Arg Ile His Thr Ser Thr Ala Thr Val Ala Val Leu Pro Glu
216          195          200          205
218 Val Glu Asp Val Glu Ile Glu Ile Arg Asn Glu Asp Leu Lys Ile Asp
219          210          215          220
221 Thr Tyr Arg Ser Ser Gly Ala Gly Gly Gln His Val Asn Thr Thr Asp
222 225          230          235          240
224 Ser Ala Val Arg Ile Thr His Leu Pro Thr Gly Val Ile Ala Thr Ser
225          245          250          255
227 Ser Glu Lys Ser Gln Ile Gln Asn Arg Glu Lys Ala Met Lys Val Leu
228          260          265          270
230 Lys Ala Arg Leu Tyr Asp Met Lys Val Gln Glu Glu Gln Gln Lys Tyr
231          275          280          285
233 Ala Ser Gln Arg Lys Ser Ala Val Gly Thr Gly Asp Arg Ser Glu Arg
234          290          295          300
236 Ile Arg Thr Tyr Asn Tyr Pro Gln Ser Arg Val Thr Asp His Arg Ile
237 305          310          315          320
239 Gly Leu Thr Leu Gln Lys Leu Gly Gln Ile Met Glu Gly His Leu Glu
240          325          330          335
242 Glu Ile Ile Asp Ala Leu Thr Leu Ser Glu Gln Thr Asp Lys Leu Lys
243          340          345          350
245 Glu Leu Asn Asn Gly Glu
246          355
249 <210> SEQ ID NO: 5
250 <211> LENGTH: 555
251 <212> TYPE: DNA
252 <213> ORGANISM: Homo sapiens
254 <400> SEQUENCE: 5
255 atggggagtg acattattaa tgaaactaaa tcaagaatgc aaaaatcaat cgaaagctta 60
256 tcacgtgaat tagctaacat cagtcgagga agagctaatt caaatattatt aaacggcgta 120
257 acagttgatt actatggtgc accaacacct gtacaacaat tagcaagcat caatgttcca 180
258 gaagcacggt tacttggtat ttctccatac gacaaaactt ctgtagctga catcgaaaaa 240
259 gcgataatag cagctaactt aggtgttaac ccaacaagtg atggtgaagt gatacgtatt 300
260 gctgtacctg ccttaacaga agaacgtaga aaagagcgcg ttaaagatgt taagaaaatt 360
261 ggtgaagaag ctaaagtatc tgttcgaaat attcgtcgtg atatgaatga tcagttgaaa 420
262 aaagatgaaa aaaatggcga cattactgaa gatgagttga gaagtggcac tgaagatgtt 480
263 cagaaagcaa cagacaattc aataaaagaa attgatcaaa tgattgctga taaagaaaaa 540
264 gatattatgt cagta 555

```

## RAW SEQUENCE LISTING

DATE: 08/17/2001

PATENT APPLICATION: US/09/925,637

TIME: 12:10:27

Input Set : A:\pb560-sl.txt

Output Set: N:\CRF3\08162001\I925637.raw

```

266 <210> SEQ ID NO: 6
267 <211> LENGTH: 185
268 <212> TYPE: PRT
269 <213> ORGANISM: Homo sapiens
271 <400> SEQUENCE: 6
272 Met Gly Ser Asp Ile Ile Asn Glu Thr Lys Ser Arg Met Gln Lys Ser
273   1           5           10           15
275 Ile Glu Ser Leu Ser Arg Glu Leu Ala Asn Ile Ser Ala Gly Arg Ala
276           20           25           30
278 Asn Ser Asn Leu Leu Asn Gly Val Thr Val Asp Tyr Tyr Gly Ala Pro
279           35           40           45
281 Thr Pro Val Gln Gln Leu Ala Ser Ile Asn Val Pro Glu Ala Arg Leu
282           50           55           60
284 Leu Val Ile Ser Pro Tyr Asp Lys Thr Ser Val Ala Asp Ile Glu Lys
285           65           70           75           80
287 Ala Ile Ile Ala Ala Asn Leu Gly Val Asn Pro Thr Ser Asp Gly Glu
288           85           90           95
290 Val Ile Arg Ile Ala Val Pro Ala Leu Thr Glu Glu Arg Arg Lys Glu
291           100          105          110
293 Arg Val Lys Asp Val Lys Lys Ile Gly Glu Glu Ala Lys Val Ser Val
294           115          120          125
296 Arg Asn Ile Arg Arg Asp Met Asn Asp Gln Leu Lys Lys Asp Glu Lys
297           130          135          140
299 Asn Gly Asp Ile Thr Glu Asp Glu Leu Arg Ser Gly Thr Glu Asp Val
300          145          150          155          160
302 Gln Lys Ala Thr Asp Asn Ser Ile Lys Glu Ile Asp Gln Met Ile Ala
303           165          170          175
305 Asp Lys Glu Lys Asp Ile Met Ser Val
306           180          185
309 <210> SEQ ID NO: 7
310 <211> LENGTH: 1176
311 <212> TYPE: DNA
312 <213> ORGANISM: Homo sapiens
314 <400> SEQUENCE: 7
315 atgggggtcaa gtaatgaatt attattagct actgagtatt tagaaaaaga aaagaagatt 60
316 cctagagcag tattaattga tgctattgaa gcagctttaa ttactgcata caaaaagaac 120
317 tatgatagtg caagaaatgt ccgtgtggaa ttaaatatgg atcaaggtac tttcaaagtt 180
318 atcgctcgta aagatgttgt tgaagaagta tttgacgaca gagatgaagt ggatttaagt 240
319 acagcgcttg ttaaaaaccc tgcatatgaa attggtgata tatacgaaga agatgtaaca 300
320 cctaaagatt ttggtcgtgt aggtgctcaa gcagcgaaac aagcagtaat gcaacgtctt 360
321 cgtgatgctg aacgtgaaat tttatttgaa gaatttatag acaaagaaga agacatactt 420
322 actggaatta ttgaccgtgt tgaccatcgt tatgtatatg tgaatttagg tcgtatcgaa 480
323 gctgttttat ctgaagcaga aagaagtcct aacgaaaaat atattcctaa cgaacgtatc 540
324 aaagtatatg ttaacaaagt ggaacaaacg acaaaaggtc ctcaaatcta tgtttctcgt 600
325 agccatccag gttttattaa acgtttattt gaacaagaag ttccagaaat ttacgatggt 660
326 actgtaattg ttaaatcagt agcacgtgaa gctggcgatc gctctaaaat tagtgtcttc 720
327 tctgaaaaca atgatataga tgctgttggt gcatgtgttg gtgctaaagg cgcacgtggt 780
328 gaagctgttg ttgaagagct agtggtgtaa aaaatcgaca tcgttcaatg gaatgaagat 840
329 ccaaaagtat ttgtaaaaaa tgctttaagc ctttctcaag ttttagaagt tattgttgat 900

```

## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/925,637

DATE: 08/17/2001

TIME: 12:10:28

Input Set : A:\pb560-sl.txt

Output Set: N:\CRF3\08162001\I925637.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No

L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:2102 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52

L:2340 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:58

L:2655 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:65

L:2722 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:66

L:2761 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:68